

THAT WHICH IS CLAIMED:

1. A heat seal die for heat sealing plastic sheets, which comprises:
first and second heat seal bars for forming heat seal lines in at least one plastic sheet, said bars being spaced in parallel relation from each other but no more than about two inches apart; a heated cutter edge for cutting linear cuts in said plastic sheet, said cutter edge being positioned between said heat seal bars; a system for heating said heat seal bars and cutter edge above the softening temperature of at least one of the sheets being sealed; and an anvil positioned to back said plastic sheet as heat sealing and cutting takes place.
2. The heat seal die of Claim 1 in which said heat seal bars carry a high-temperature-stable, anti-adhesive layer to prevent sticking of said plastic sheets to said seal bars.
3. The heat seal die of Claim 1 in which a heater rod extends through a cutter body that defines said cutter edge, a major portion of said heater rod being in contact with said cutter body and a minor portion of said heater rod being in contact with said heat seal bars, whereby the temperature of said cutter edge is greater than the temperature of said seal bars where they engage the plastic sheets.
4. The heat seal die of Claim 1 in which said heat seal bars comprise arms of integral, U-shaped structure.
5. The heat seal die of Claim 1 in which said die and anvil are adjustably positionable relative to each other.
6. The heat seal die of Claim 1 in which said heat seal bars carry a high-temperature stable anti-adhesive layer to prevent sticking of said plastic sheets to said seal bars, and a heater rod extending through a cutter body that defines said cutter edge, a major portion of said heater

rod being in contact with said cutter body and a minor portion of said heater rod being in contact with said heat seal bars, whereby the temperature of said cutter edge is greater than the temperature of said heat seal bars where they engage the plastic sheets.

7. The heat seal die of Claim 6 in which said heat seal bars comprise arms of an integral, U-shaped structure.

8. The heat seal die of Claim 7 in which said die and anvil are adjustably positionable relative to each other.

9. The method of preparing bags for produce or the like, which comprises:
advancing a solid-wall thermoplastic sheet and a mesh sheet, each having an upper edge, along a process line;

folding a bottom portion of said plastic sheet upwardly to define a lower edge of said thermoplastic sheet at a fold line;

sealing the upwardly folded portion of said solid-wall thermoplastic sheet to a lower edge of said mesh sheet; forming transverse slits in said sheets, and heat sealing the sheets together at edges of said slits to form separate bags between said slits, said slits extending across both sheet lower edges of the bag but being spaced from said upper edges;

dropping produce between said sheet upper edges into said bags; and

heat sealing said bags adjacent to the upper edges thereof.

10. The method of Claim 9 in which at least some of said heat seals are formed by a heat seal die which comprises first and second heat seal bars for forming heat seal lines between said plastic sheet and said mesh sheet, said heat seal bars being spaced in parallel relation from each other no more than about two inches apart, said heat seal die further comprising a heated

cutter edge for cutting linear cuts in said plastic sheet and mesh sheet, said cutter edge being positioned between said heat seal bars; and a system for heating said heat seal bars and the cutter edge above the softening temperature of the plastic sheet.

11. The method of Claim 10 in which said heat seal bars carry a high-temperature-stable, anti-adhesive layer to prevent sticking of said plastic sheets to said seal bars.

12. The method of Claim 10 in which a heater rod extends through a cutter body that defines said cutter edge, a major portion of said heater rod being in contact with said cutter body and a minor portion of said heater rod being in contact with said heat seal bars, whereby the temperature of said cutter edge is greater than the temperature of said seal bars where they engage the plastic sheet and the mesh sheet.

13. The method of Claim 12 in which said heat seal bars comprise arms of an integral, U-shaped structure.

14. The method of Claim 10 in which said mesh sheet comprises at least two sets of parallel strands in crossing relation to each other, one of said sets of strands being substantially parallel to the direction of advancement of said thermoplastic sheet and said mesh sheet along said process line.

15. The method of preparing bags for produce or the like, which comprises:
advancing a solid-wall thermoplastic sheet and a mesh sheet, each having an upper edge, along a process line;

folding a bottom portion of said plastic sheet upwardly to define a lower edge of said thermoplastic sheet at a fold line; and

sealing the upwardly folded portion of said solid-wall thermoplastic sheet to a lower edge

of said mesh sheet and transversely heat sealing the sheets together to form separate bags which are laterally connected together to form a strip of said connected bags.

16. The method of claim 15 in which the transverse heat sealing includes the step of forming transverse slits in said sheets, and heat sealing the sheets together at edges of said slits to form separate bags between said slits, said slits extending across the lower edge of the bags, but being spaced from said upper edge, whereby said bags remain as a laterally connected, integral web of a plurality of bags.

17. The method of claim 16 in which an indicia strip is inserted into the sealed, upwardly folded portion of said solid-wall thermoplastic sheet, said strip being enclosed by a pair of thermoplastic sheet portions.

18. The method of claim 15 in which an indicia strip is inserted into the sealed, upwardly folded portion of said solid-wall thermoplastic sheet to be enclosed by a pair of thermoplastic sheet portions.

19. The method of claim 9 which further includes the steps of:

dropping produce between said sheet upper edges into said bag prior to

heat sealing said bags adjacent to the upper edges thereof to seal the bag interiors; and

separating the joined bags.

20. The method of filling laterally joined bags with produce or the like, a plurality of which bags comprise a strip of solid-wall thermoplastic sheeting and a strip of mesh sheeting, each peripherally joined together, with the solid-wall sheet having a folded bottom portion to define a lower edge of said bags and defining a portion of each bag where both sides are made of the solid wall sheeting, one end of said solid-wall sheeting being sealed to a lower edge of said

mesh sheet, which method comprises:

dropping produce between upper edges of said solid-wall and mesh sheeting into said bags;

heat sealing said bags adjacent to the upper edges thereof; and

separating the respective bags.

21. The method of claim 20 in which said side seals of the bags are formed by a heat seal die which comprises first and second heat seal bars forming heat seal lines between said plastic sheet and said mesh sheet, said heat seal bars being spaced in parallel relation from each other no more than about two inches apart, said heat seal die further comprising a heated cutter edge for cutting linear cuts in said plastic sheet and mesh sheet, said cutter edge being positioned between the said heat seal bars, and a system for heating said heat seal bars and the cutter edge to about the softening temperature of the plastic sheet.

22. The method of claim 15 in which said side seals of the bags are formed by a heat seal die which comprises first and second heat seal bars for forming heat seal lines between said plastic sheet and said mesh sheet, said heat seal bars being spaced in parallel relation from each other no more than about two inches apart, said heat seal die further comprising a heated cutter edge for cutting linear cuts in said plastic sheet and mesh sheet, said cutter edge being positioned between the said heat seal bars, and a system for heating said heat seal bars and the cutter edge to about the softening temperature of the plastic sheet.

23. The method of claim 22 in which a heater rod extends through a cutter body that defines said cutter edge, a major portion of said heater rod being in contact with said cutter body and a minor portion of said heater rod being in contact with said heat seal bars, whereby the

temperature of said cutter edge is greater than the temperature of said heat seal bars where they engage the plastic sheet and the mesh sheet.

24. The method of claim 20 in which said mesh sheet comprises at least two sets of parallel strands in crossing relation to each other, and including the step of advancing said laterally joined bags along a process line, one of said sets of strands being substantially parallel to the direction of advancement of said joined bags along said process line.

25. The method of claim 9 in which said mesh sheet comprises at least two sets of parallel strands in crossing relation to each other, and including the step of advancing said laterally joined bags along a process line, one of said sets of strands being substantially parallel to the direction of advancement of said thermoplastic sheet and said mesh sheet along said process line.

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